

CHAPTER 1 APPENDICES

- A1-1 Biological Monitoring Stations
 and Warmwater Aquatic Habitat
 Use Assessment**
- A1-2 Intensive Surveys Conducted
 During FFY 1994-1995**
- A1-3 Impaired Streams**
- A1-4 Swimming Advisory Notice**

**TABLE (A1 - 1) BIOLOGICAL MONITORING STATIONS AND
WARMWATER AQUATIC HABITAT (WAH)
USE ASSESSMENT (1994-1995)**

STATION	MILES ASSESSED	WAH USE SUPPORT
Green River Basin	278.7	
Green River - Munfordville	66.7	Full Support
Green River - Island	25.0	Full Support
Bacon Creek	31.2	Full Support
Barren River	21.0	Full Support
Mud River	21.5	Partial Support
Nolin River	49.2	Full Support
Pond River	30.1	Partial Support
Rough River	34.0	Full Support
Kentucky River Basin	328.8	
Kentucky River-Frankfort	53.7	Full Support
Kentucky River - Camp Nelson	39.9	Full Support
Kentucky River - Lock 11	35.4	Full Support
Kentucky River - Lock 14	29.0	Full Support
North Fk Kentucky River	9.2	Partial Support
Middle Fk Kentucky River	43.2	Full Support
South Fk Kentucky River	33.5	Full Support
Boone Creek	7.4	Full Support
Dix River	3.0	Full Support
Eagle Creek	38.8	Partial Support
Red River	18.1	Full Support
South Elkhorn Creek	17.6	Partial Support
Little Sandy River Basin	39.3	
Little Sandy River	39.3	Full Support
Ohio River Minor Basins	38.3	
Kinniconick Creek	24.5	Full Support
Little Kentucky River	13.8	Full Support
Tradewater River Basin	26.3	
Tradewater River	26.3	Partial Support
Tygarts Creek Basin	45.7	
Tygarts Creek	45.7	Full Support

Table A1-2. Intensive Surveys Conducted During FFY 1994 - 1995

Waterbody Name	Survey Purpose	Year Surveyed	Total Miles Assessed	Miles Supporting Uses	Miles Supporting Uses but Threatened	Miles Partially Supporting Uses	Miles Not Supporting Uses	Conclusions
Ohio River Basin								
Hite Creek	To determine the impact of municipal WWTP effluent on instream biological communities	Fall 1995	5.5				5.5	The first 1.9 miles are impacted by effluent from a municipal WWTP and the remaining 3.6 miles are degraded by nonpoint source pollution.
Big Bone Creek	To determine baseline water quality.	Spring 1995	2.1		2.1			Nonpoint source pollution from upstream agricultural operations is increasing siltation.
Gunpowder Creek	To determine the impact of ethylene glycol on instream biological communities	Spring 1995	5.0			2.7	2.3	Ethylene glycol from airplane deicing operations has degraded 2.3 miles of stream while 2.7 miles are impacted by unknown sources.
Pond Creek and UT Pond Creek	To determine the impact of a privately owned waste treatment plant (WWTP) on the instream biological communities.	Spring 1994	2.4 0.9		0.9	1.5 0.4	0.5	A privately owned WWTP has impacted the lower 0.5 mi. of UT-Pond Creek and the lower 1.5 miles of Pond Creek. The upper 0.5 mi of Pond Creek above the UT are affected by nonpoint source agricultural activities.

Table A1-2. Intensive Surveys Conducted During FFY 1994 - 1995

Waterbody Name	Survey Purpose	Year Surveyed	Total Miles Assessed	Miles Supporting Uses	Miles Supporting Uses but Threatened	Miles Partially Supporting Uses	Miles Not Supporting Uses	Conclusions
Kentucky River Basin								
Kentucky River Drainage Clarks Run	To determine the impact from municipal WWTP effluent on instream biological communities.	Fall 1995	13.9		7.3	4.3	2.3	A municipal WWTP is degrading 6.6 miles of stream below the discharge. 7.3 miles above the WWTP are supporting water quality criteria but are threatened by nonpoint source urban runoff and agricultural activities.
Logan Creek	To determine the impact from municipal WWTP effluent on instream biological communities.	Fall 1995	3.5		3.5			The lower 3.5 miles of Logan Creek are supporting warmwater aquatic life criteria but are threatened by municipal WWTP effluent and nonpoint source agricultural pollution.
Cumberland River Basin								
Pitman Creek	To determine the impact from municipal WWTP effluent on instream biological communities	Fall 1995	5.4		3.7	1.7		A municipal WWTP is degrading 1.7 miles of stream below the effluent discharge. 3.7 miles above the WWTP are supporting warmwater aquatic life criteria but are threatened by nonpoint source agricultural pollution.
Sinking Creek	To determine baseline water quality	Fall 1995	1.8		1.8			The lower 1.8 miles are supporting warmwater aquatic life criteria but are threatened by urban runoff.

Table A1-2. Intensive Surveys Conducted During FFY 1994 - 1995

Waterbody Name	Survey Purpose	Year Surveyed	Total Miles Assessed	Miles Supporting Uses	Miles Supporting Uses but Threatened	Miles Partially Supporting Uses	Miles Not Supporting Uses	Conclusions
Green River Basin								
Little Pitman Creek	To determine the impact from municipal WWTP effluent on instream biological communities.	Fall 1995	5.3		1.1	4.2		At least 4.2 miles below a municipal WWTP have been impacted by effluent. The 1.1 miles above the WWTP were supporting warmwater aquatic life criteria but are threatened by unknown sources.
South Fork Russell Creek and UT #1 UT #2	To determine the impact of oil well brine discharges on instream biological communities.	Winter 1995	6.4 0.6 0.5	1.6 0.5	4.8		0.6	A total of 6.4 miles of South Fork Russell Creek supports warmwater aquatic life criteria. 4.8 miles below UT #1 are threatened by brine discharges occurring in UT #1. UT#1 does not support warmwater aquatic life criteria.
Green River	To determine baseline water quality.	Summer 1994	12.0		12.0			Twelve miles of the Green River within the Mammoth Cave National Park are supporting warmwater aquatic life criteria but are threatened by an upstream municipal WWTP and nonpoint source agriculture activities.

Table A1-2. Intensive Surveys Conducted During FFY 1994 - 1995

Waterbody Name	Survey Purpose	Year Surveyed	Total Miles Assessed	Miles Supporting Uses	Miles Supporting Uses but Threatened	Miles Partially Supporting Uses	Miles Not Supporting Uses	Conclusions
Salt River Basin								
Salt River	To determine the impact from municipal WWTP effluent on instream biological communities.	Fall 1995	9.9		7.1	2.8		In Harrodsburg area, 2.8 miles of river have been impacted by municipal WWTP effluent. The remaining 7.1 miles support warmwater aquatic life criteria but are threatened by nonpoint source agriculture pollution.
Town Creek	To determine baseline water quality	Fall 1995	4.0		4.0			All 4.0 miles are supporting warmwater aquatic life criteria but are threatened by urban runoff.
Mill Creek	To determine the impact of a privately owned WWTP effluent on instream biological communities.	Fall 1993	7.0	2.8	4.2			All 7.0 miles are supporting warmwater aquatic life criterion, but 4.2 miles are threatened by effluent from a privately owned WWTP.
Mill Creek Branch and UT	To determine the impact of a privately owned WWTP effluent on instream biological communities.	Fall 1993	0.7 0.4			0.7 0.4		Both Mill Creek Branch and the UT both have been impacted by effluent from a privately owned WWTP.

Table A1 - 2. Intensive Surveys Conducted During FFY 1994 - 1995

Waterbody Name	Survey Purpose	Year Surveyed	Total Miles Assessed	Miles Supporting Uses	Miles Supporting Uses but Threatened	Miles Partially Supporting Uses	Miles Not Supporting Uses	Conclusions
Licking River Basin								
Hinkston Creek	To determine the impact of municipal WWTP effluent on instream biological communities.	Fall 1995	7.8		4.9	2.9		Hinkston Creek above the WWTP (4.9 miles) supports warmwater aquatic life criteria but is threatened by agricultural nonpoint source pollution. A stream reach of 2.9 miles below the WWTP is degraded by the municipal WWTP effluent.
Somerset Creek	To determine baseline water quality	Fall 1995	3.9		3.9			All 3.9 miles support warmwater aquatic life criteria but are threatened by agricultural nonpoint source pollution.
	Totals		106.1	4.9	68.4	21.2	11.6	

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
BIG SANDY RIVER BASIN				
Beaver Creek (Floyd Co.)	AL-NS	0.0-7.0	Siltation	Resource Extraction
Big Sandy River (Lawrence Co.)	AL-PS AL-PS AL-PS AL-PS AL-PS	9.3-10.3 12.4-13.4 14.4-15.4 18.0-19.0 23.8-25.8	Other habitat alterations	Hydromodification
Buck Branch (Floyd Co.)	AL-NS SW-NS	0.0-0.7 0.0-0.7	pH	Resource Extraction
Bull Creek (Floyd Co.)	AL-PS	0.0-7.2	Pathogens Siltation	On-site Wastewater Systems (Septic Tanks) Resource Extraction
Horse Creek (Boyd Co.)	AL-NS SW-NS	0.0-1.0 0.0-1.0	Pathogens Organic enrichment/ low DO Nutrients	Sanitary Sewer Overflow
Hurricane Creek (Pike Co.)	AL-NS SW-NS	0.5-2.9 0.5-2.9	pH	Resource Extraction
Jennys Creek (Johnson Co.)	AL-NS	0.0-18.8	Siltation	Construction
Johns Creek (Floyd Co.)	AL-PS	19.5-107.2	Siltation	Resource Extraction
Knox Creek (Pike Co.)	AL-PS	0.0-7.6	Siltation	Resource Extraction
Left Fork Beaver Creek (Knott Co.)	AL-NS	0.0-28.0	Siltation	Resource Extraction
Left Fork Blaine Creek (Lawrence Co.)	AL-PS	0.0-7.3	Salinity/TDS/Chlorides	Petroleum Activities
Left Fork Middle Creek (Floyd Co.)	AL-NS SW-NS	4.2-9.5 4.2-9.5	pH	Acid Mine Drainage
Levisa Fork (Lawrence Co.)	AL-PS SW-NS SW-PS	116.2-124.1 57.6-124.1 1.0-38.9	Pathogens	On-site Wastewater Systems (Septic Tanks) Sanitary Sewer Overflow Municipal Point Source

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Lick Fork (Floyd Co.)	AL-NS SW-NS	0.0-2.0 0.0-2.0	pH	Resource Extraction
Long Fork (Pike Co.)	AL-NS SW-NS	0.0-5.1 0.0-5.1	pH	Resource Extraction
Middle Creek (Floyd Co.)	AL-PS	0.0-18.0	Siltation	Resource Extraction
Mud Creek (Floyd Co)	SW-PS	0.0-17.0	Pathogens	On-site Wastewater Systems (Septic Tanks)
Mudlick Creek (Floyd Co)	AL-PS	0.0-11.0	Siltation	Resource Extraction
Right Fk Beaver Creek (Knott Co)	AL-NS	0.0-39.0	Siltation	Resource Extraction
Right Fk Blaine Creek (Lawrence Co)	AL-PS	0.0-6.2	Salinity/TDS/Chlorides	Petroleum Activities
Russell Fork (Pike Co)	SW-PS	0.0-12.9	Pathogens	Sanitary Sewer Overflow
Shelby Creek (Pike Co)	AL-PS SW-PS	0.0-27.3 0.0-27.3	Pathogens Siltation	On-site Wastewater Systems (Septic Tanks) Resource Extraction
Stinking Branch (Pike Co)	AL-NS SW-NS	0.0-2.3 0.0-2.3	pH	Acid Mine Drainage
Tug Fork (Lawrence Co)	SW-NS	0.0-36.2	Pathogens	On-site Wastewater Systems (Septic Tanks)
Wolf Creek (Martin Co.)	AL-PS	0.0-20.5	Siltation	Resource Extraction
LITTLE SANDY RIVER BASIN				
Little Sandy River (Greenup Co.)	SW-NS	11.7-37.7	Pathogens	On-site Wastewater Systems (Septic Tanks) Agriculture
Newcombe Co. (Elliott Co.)	AL-NS	0.0-11.9	Salinity/TDS/Chlorides	Petroleum Activities

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
TYGARTS CREEK BASIN				
Hood Creek (Boyd Co.)	AL-NS SW-NS	0.0-0.8 0.0-0.8	Pathogens Organic Enrichment/low DO Nutrients	Sanitary Sewer Overflow
Tygarts Creek (Greenup Co.)	AL-NS SW-PS	77.5-77.7 0.0-45.7	Pathogens Organic Enrichment/low DO	Agriculture Municipal Point Sources
White Oak Creek (Greenup Co.)	AL-NS	0.0-1.1	Other Habitat alterations	Habitat Modification
UPPER CUMBERLAND BASIN				
Bacon Creek (Whitley Co.)	AL-NS	0.0-4.0	Suspended Solids Other habitat alterations	Hydromodification
Barren Fork (McCreary Co.)	AL-NS SW-NS	0.0-5.3 0.0-5.3	pH	Acid Mine Drainage
Bear Creek (McCreary Co.)	AL-NS SW-NS	0.0-3.2 0.0-3.2	pH	Subsurface Mining Surface Mining
Bennets Fork (Bell Co.)	AL-PS	0.0-6.3	Other habitat alterations Siltations	Resource Extraction
Big Lily Creek (Russell Co.)	AL-NS	4.4-7.0	Salinity/TDS/Chlorides Organic Enrichment/low DO	Urban Runoff/Storm Sewers Municipal Point Sources
Brush Creek (Rockcastle Co.)	SW-NS	1.1-7.5	Pathogens	On-site Wastewater Systems (Septic Tanks) Agriculture
Buck Creek (Whitley Co.)	AL-NS	1.4-2.8	Turbidity Other habitat alterations Siltation	Resource Extraction
Bucks Branch (Whitley Co.)	AL-NS SW-NS	0.0-2.3 0.0-2.3	pH	Acid Mine Drainage
Cane Branch (McCreary Co.)	AL-NS SW-NS	0.0-2.0 0.0-2.0	pH	Acid Mine Drainage

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Catron Creek (Harlan Co.)	SW-NS	0.0-8.5	Pathogens	On-site Wastewater Systems (Septic Tanks) Package Plants Municipal Point Sources
Clear Creek (Bell Co.)	SW-NS	2.5-3.7	Pathogens	Package Plants
Clear Fork Branch (Clinton Co.)	AL-PS SW-PS	2.6-3.6 2.6-3.6	Pathogens Organic Enriched/Low DO Nutrients	Municipal Point Sources
Clover Fork (Harlan Co.)	SW-NS	0.0-34.5	Pathogens	On-site Wastewater Systems (Septic Tanks) Package Plants Municipal Point Sources
Cloverlick Creek (Harlan Co.)	AL-NS	0.0-5.0	Suspended Solids Other habitat alterations	Resource Extraction
Copperas Creek (McCreary Co.)	AL-NS SW-NS	0.0-3.8 0.0-3.8	pH	Acid Mine Drainage
Crooked Creek (Rockcastle Co.)	SW-PS	1.0-6.4	Pathogens	On-site Wastewater Systems (Septic Tanks) Agriculture
Crummies Creek (Harlan Co.)	AL-NS SW-NS	0.0-6.4 0.0-6.4	Suspended Solids pH Metals	Resource Extraction
Cumberland River (Upper Section) (Monroe Co.)	SW-NS SW-NS	650.6-654.4 684.9-694.2	Pathogens	On-site Wastewater Systems (Septic Tanks) Agriculture Sanitary Sewer Overflow Municipal Point Sources
Devils Creek (McCreary Co.)	AL-NS SW-NS	0.0-2.4 0.0-2.4	pH	Acid Mine Drainage
East Ridge Branch (Knox Co.)	AL-NS	0.0-1.5	Other habitat alterations	Silviculture
Fugitt Creek (Harlan Co.)	AL-NS	0.0-4.5	Suspended Solids Other habitat alterations	Resource Extraction

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Gillis Branch (Laurel Co.)	AL-PS	1.7-3.2	Oil and Grease Siltation	Spills Construction
Greasy Creek (Bell Co.)	SW-PS	0.0-11.4	Pathogens	Source Unknown
Horse Creek (Laurel Co.)	AL-PS	0.0-1.0	Oil and Grease	Land Disposal
Horse Lick Creek (Rockcastle Co.)	SW-PS	0.0-21.2	Pathogens	On-Site Wastewater Systems (Septic Tanks)
Indian Creek (Jackson Co.)	AL-PS SW-PS	3.3-7.3 3.3-7.3	Suspended Solids Pathogens pH Nutrients	Resource Extraction Silviculture
Jennys Branch (McCreary Co.)	AL-NS	0.0-5.5	Suspended Solids	Construction
Lacy Fork (Pulaski Co.)	AL-PS SW-PS	0.0-1.0 0.0-1.0	pH	Resource Extraction
Left Fork Straight Creek (Bell Co.)	AL-NS SW-NS	0.0-13.0 0.0-13.0	Suspended Solids Pathogens pH	On-site Wastewater Systems Resource Extraction Package Plants
Lick Creek (McCreary Co.)	AL-NS SW-NS	0.0-5.7 0.0-5.7	Suspended Solids Other habitat alterations pH Metals	Resource Extraction
Little Clear Creek (Bell Co.)	AL-PS	0.0-16.4	Suspended Solids Other habitat alterations	Resource Extraction Silviculture
Little Laurel River (Laurel Co.)	SW-NS AL-NS	12.4-14.6 12.4-14.6	Pathogens Organic Enrichment/low DO Nutrients	Municipal Point Sources
Little Racoone Creek (Laurel Co.)	AL-NS SW-NS	0.0-7.7 0.0-7.7	Salinity/TDS/Chlorides pH Metals	Resource Extraction
Looney Creek (Harlan Co.)	SW-NS	0.0-5.5	Pathogens	Package Plants Municipal Point Sources

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Lynn Camp Creek (Whitley Co.)	AL-PS	0.0-8.5	Oil and Grease Metals	Spills Urban Runoff/Storm Sewers Sanitary Sewer Overflow Water Treatment Plants Municipal Point Sources
Marsh Creek (McCreary Co.)	AL-NS	18.7-24.0	Other habitat alterations Siltation	Resource Extraction Agriculture
Martins Fork (Harlan Co.)	AL-NS SW-NS SW-NS	18.0-31.3 0.0-10.1 18.0-31.3	Pathogens pH	Resource Extraction Municipal Point Sources
Middle Fork Stinking Creek (Knox Co.)	AL-NS	0.0-1.5	Suspended Solids Other habitat alterations	Silviculture Agriculture
Pitman Creek (Pulaski Co.)	AL-PS	4.0-5.7	Nutrients Unknown Toxicity	Agriculture Municipal Point Sources
Pleasant Run (Whitley Co.)	AL-NS	2.0-2.7	Suspended Solids Other habitat alterations	Hydromodification Agriculture
Pond Creek (Jackson Co.)	AL-NS SW-NS	5.0-7.7 5.0-7.7	Suspended Solids Pathogens Organic Enrichment/low DO Unionized Ammonia	Package Plants Municipal Point Sources
Poor Fork (Harlan Co.)	SW-NS	0.0-25.1	Pathogens	On-site Wasterwater Systems (Septic Tanks) Package Plants Municipal Point Sources
Puckett Creek (Bell Co.)	SW-PS	0.0-10.0	Pathogens	Source Unknown
Robinson Creek (Laurel Co.)	AL-NS	0.0-13.1	Salinity/TDS/Chlorides Siltation	Resource Extraction
Rock Creek (McCreary Co.)	AL-NS SW-NS	0.0-4.1 0.0-4.1	Suspended Solids Other habitat alterations pH Metals	Resource Extraction

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Rockcastle River (Pulaski Co.)	SW-PS	8.5 -41.3	Pathogens	On-site Wastewater Systems (Septic Tanks) Agriculture Municipal Point Sources
Ryans Creek (McCreary Co.)	AL-NS SW-NS	0.0-5.3 0.0-5.3	Suspended Solids pH	Acid Mine Drainage
Sinking Creek (Pulaski Co.)	AL-PS SW-NS	1.8-4.5 0.0-2.5	Oil and Grease Pathogens Cause Unknown	Source Unknown Resource Extraction Municipal Point Sources
Spring Creek (Clinton Co.)	AL-PS	3.7-7.3	Oil and Grease	Resource Extraction
Stinking Creek (Knox Co.)	AL-NS	9.5-12.6	Suspended Solids Other habitat alterations	Silviculture Agriculture
Straight Creek (Bell Co.)	SW-NS	0.0-23.5	Pathogens	On-Site Wastewater Systems (Septic Tanks)
Turkey Creek (Bell Co.)	AL-NS SW-NS	0.0-2.7 0.0-2.7	Suspended Solids Other habitat alterations pH	Resource Extraction
White Oak Creek (McCreary Co.)	AL-NS SW-NS	0.0-4.2 0.0-4.2	Suspended Solids Other habitat alterations pH Metals	Resource Extraction
White Oak Creek (Rockcastle Co.)	AL-NS	0.0-4.0	Suspended Solids Other habitat alterations	Silviculture
Whitley Branch (Laurel Co.)	SW-NS	0.0-2.5	Pathogens	Off-farm Animal Holding/Management Area Sanitary Sewer Overflow
Wildcat Branch (Pulaski Co.)	AL-NS SW-NS	0.0-2.1 0.0-2.1	pH	Acid Mine Drainage
Yellow Creek (Bell Co.)	AL-PS	0.0-18.5	Siltation Nutrients	Municipal Point Sources
Yocum Creek (Harlan Co.)	SW-NS	0.0-6.5	Pathogens	On-site Wastewater Systems (Septic Tanks)

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
LICKING RIVER BASIN				
Allison Creek (Fleming Co.)	AL-NS SW-NS	0.0-4.7 0.0-4.7	Noxious Aquatic Plants Pathogens Organic Enrichment/low DO Nutrients	Animal Operations Pasture Land Agriculture
Banklick Creek (Kenton Co.)	AL-NS SW-NS	0.0-19.0 0.0-19.0	Pathogens Other habitat alterations Organic Enrichment/low DO Nutrients	Hydromodification Urban Runoff / Storm Sewers Combined Sewer Overflow Municipal Point Sources
Beaver Creek (Menifee Co.)	AL-NS	13.5-14.5	Suspended Solids	Municipal Point Sources
Bullock Pen (Kenton Co.)	SW-PS	2.0-5.3	Pathogens	Sanitary Sewer Overflow
Craintown Branch (Fleming Co.)	AL-PS SW-PS	0.0-3.5 0.0-3.5	Noxious Aquatic Plants Pathogens Nutrients	Animal Operations Pasture Land Agriculture
Doty Creek (Fleming Co.)	AL-NS SW-NS	0.0-4.0 0.0-4.0	Pathogens Organic Enrichment/low DO	Animal Operations Pasture Land
Fleming Creek (Nicholas Co.)	AL-NS SW-NS	22.7-39.2 22.7-39.2	Pathogens Nutrients Organic Enrichment/low DO	Agriculture
Fowlers Creek (Kenton Co.)	AL-PS	0.0-6.9	Organic Enrichment/low DO Siltation Nutrients	Construction Package Plants Municipal Point Sources
Hinkston Creek (Bourbon Co.)	AL-PS	63.0-65.9	Nutrients Unknown Toxicity	Agriculture Municipal Point Sources
Houston Creek (Bourbon Co.)	SW-PS SW-PS	3.7-4.7 7.1-8.1	Pathogens	Minor Municipal Point Source Municipal Point Sources

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Licking River (Bracken Co.)	AL-NS SW-PS SW-NS AL-PS SW-NS	267.7-301.1 71.6-106.8 0.0-4.6 237.7-244.1 226.4-239.3	Pathogens Salinity/TDS/Chlorides Organic Enrichment/low DO Siltation	Resource Extraction Agriculture Combined Sewer Overflow Municipal Point Sources
Logan Run (Fleming Co.)	AL-NS	0.0-2.3	Nutrients	Agriculture
Mill Creek (Mason Co.)	AL-PS SW-PS	0.0-11.0 0.0-11.0	Pathogens Nutrients	Animal Operations
North Fork Licking River (Bracken Co.)	SW-NS	0.0-31.8	Pathogens	On-site Wastewater Systems (Septic Tanks) Agriculture
Shannon Creek (Mason Co.)	AL-PS SW-PS	0.0-11.2 0.0-11.2	Pathogens	Animal Operations
South Fork Licking River (Pendleton Co.)	SW-PS	11.5-27.1	Pathogens	On-site Wastewater Systems (Septic Tanks) Agriculture Municipal Point Sources
Stoner Creek (Bourbon Co.)	SW-NS	14.0-15.0	Pathogens	Municipal Point Sources
Strodes Creek (Bourbon Co.)	AL-NS SW-NS	20.5-22.0 20.5-22.0	Pathogens Organic Enrichment/low DO	Municipal Point Sources
Sycamore Creek (Montgomery Co.)	AL-PS SW-PS	0.0-0.9 0.0-0.9	Suspended Solids Pathogens Nutrients	Municipal Point Sources
Three Mile Creek (Campbell Co.)	AL-NS SW-NS	0.0-4.7 0.0-4.7	Pathogens Organic Enrichment/low DO Nutrients	Sanitary Sewer Overflow
Town Branch (Fleming Co.)	SW-NS	0.0-4.0	Pathogens	Animal Operations Pasture Land Agriculture
Trace Fork (Magoffin Co.)	AL-NS	0.0-8.4	Siltation	Resource Extraction

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
UT of Hinkston Creek at MP 51.0 (Bath Co.)	AL-NS	2.0-3.0	Organic Enrichment/low DO Nutrients	Municipal Point Sources
Wilson Run (Fleming Co.)	SW-NS	0.0-5.1	Pathogens	Animal Operations Pasture Land
KENTUCKY RIVER BASIN				
Baughman Fork (Fayette Co.)	AL-NS	0.0-1.1	Organic Enrichment/low DO Nutrients	Municipal Point Sources
Beech Fork (Leslie Co.)	AL-PS	0.0-6.0	Suspended Solids Other Habitat Alterations	Resource Extraction
Boone Fork (Letcher Co.)	AL-NS	0.0-3.3	Siltation	Resource Extraction
Bull Creek (Perry Co.)	AL-NS	0.0-5.3	Siltation	Resource Extraction
Cane Creek (Breathitt Co.)	SW-NS	0.0-9.5	Pathogens	Agriculture On-site Wastewater Systems (Septic Tanks)
Cane Run (Scott Co.)	AL-PS	0.0-17.4	Unknown Toxicity	Domestic Wastewater Lagoon
Carr Fork (Perry Co.)	AL-PS SW-NS	15.8-26.4 0.2-8.9	Siltation Pathogens	Resource Extraction On-site Wastewater Systems (Septic Systems)
Clarks Run (Boyle Co.)	AL-PS AL-NS	0.0-4.3 4.3-6.6	Organic Enrichment/low DO Nutrients Chlorine	Urban Runoff/Storm Sewers Agriculture Municipal Point Sources
Clear Creek (Knott Co.)	AL-NS SW-NS	0.0-5.5 0.0-5.5	pH	Resource Extraction
Copper Creek (Lincoln Co.)	AL-PS	0.0-11.8	Siltation Nutrients	Agriculture
Crawfish Branch (Clay Co.)	SW-NS	0.0-0.2	Pathogens	Land Disposal

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Cutshin Creek (Leslie Co.)	AL-PS	0.0-28.8	Suspended Solids Oil and Grease	Petroleum Activities Silviculture
Dix River (Jessamine Co.)	SW-PS	33.0-36.0	Pathogens	Agriculture Municipal Point Sources
Drowning Creek (Estill Co.)	AL-PS	0.0-3.1	Siltation	Agriculture
Dry Run (Scott Co.)	AL-PS	0.0-7.5	Nutrients	Industrial Point Sources
Eagle Creek (Carroll Co.)	AL-PS SW-PS	0.0-38.8 0.0-38.8	Pathogens	Agriculture
Four Mile Creek (Clark Co.)	AL-PS	1.3-3.0	Other habitat alterations	Hydromodification
Greasy Creek of Middle Fk Kentucky (Leslie Co.)	AL-PS AL-PS	8.4-20.5 25.5-26.5	Suspended Solids Other habitat alterations	Resource Extraction
Hickman Creek (Jessamine Co.)	AL-NS	0.0-25.0	Other habitat alterations Organic Enrichment/low DO Siltation Nutrients	Hydromodification Urban Runoff/Storm Sewers Construction Municipal Point Sources Industrial Point Sources
Jerushia Branch (Owsley Co.)	AL-PS	0.0-1.5	Suspended Solids Other habitat alterations	Silviculture
Kentucky River (Carroll Co.)	SW-PS SW-PS	64.5-158.1 190.8-226.2	Pathogens	Agriculture Combined Sewer Overflow
Kings Creek (Letcher Co.)	AL-NS	0.0-6.5	Siltation	Resource Extraction
Lanes Run (Scott Co.)	AL-PS	0.0-6.5	Nutrients	Industrial Point Sources

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Laurel Creek (Clay Co.)	AL-NS SW-NS	2.5-5.4 2.5-5.4	Suspended Solids Pathogens Organic Enrichment/low DO Nutrients Unionized Ammonia	Municipal Point Sources Package Plants
Leatherwood Creek (Perry Co.)	AL-PS SW-PS	0.0-20.5 0.0-20.5	Siltation pH	Resource Extraction
Lee Branch (Woodford Co.)	AL-NS	0.0-1.0	Organic Enrichment/low DO	Municipal Point Sources
Little Eagle Creek (Scott Co.)	SW-NS	10.0-11.0	Pathogens	Package Plants Municipal Point Sources
Little Goose Creek (Clay Co.)	AL-NS SW-NS	3.7-4.7 3.7-4.7	Nutrients Pathogens	Package Plants
Lost Creek (Perry Co.)	AL-NS	0.0-18.5	Siltation	Resource Extraction
Maces Creek (Perry Co.)	AL-NS	0.0-6.8	Siltation	Resource Extraction
Middle Fork Kentucky River (Lee Co.)	AL-PS AL-NS SW-PS SW-PS	71.9-74.8 75.6-102.7 0.0-43.2 71.9-74.8	Suspended Solids Pathogens Organic Enrichment/low DO	On-site Wastewater Systems (Septic Tanks) Resource Extraction Package Plants Municipal Point Sources
Neals Creek (Lincoln Co.)	AL-NS	4.4-5.4	Suspended Solids	Water Treatment Plants Municipal Point Sources
North Fork Kentucky River (Lee Co.)	AL-PS AL-NS SW-NS	49.4-58.6 79.7-167.1 49.4-58.6	Metals Pathogens Organic Enrichment/low DO Siltation	Source Unknown Resource Extraction Package Plants Municipal Point Sources
Red Bird River (Clay Co.)	AL-PS	81.7-82.3	Suspended Solids Other habitat alterations	Silviculture

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Red River (Powell Co.)	AL-PS SW-NS	59.9-94.2 9.5-41.1	Pathogens Siltation Nutrients Unionized Ammonia	Source Unknown Streambank Modification/ Destabilization Removal of Riparian Vegetation Habitat Modification On-site Wastewater Systems (Septic Tanks) Urban Runoff/Storm Sewers Silviculture Agriculture Municipal Point Sources
Rockhouse Creek (Letcher Co.)	AL-NS SW-NS	0.0-24.3 0.0-24.3	pH Siltation	Resource Extraction
Sand Lick Fork (Powell Co.)	AL-NS	0.0-5.0	Salinity/TDS/Chlorides	Petroleum Activities
Smoot Creek (Letcher Co.)	AL-NS	0.0-7.4	Siltation	Resource Extraction
South Elkhorn Creek (Franklin Co.)	AL-PS SW-PS	16.4-34.0 16.4-34.0	Organic Enrichment/low DO Pesticides Pathogens	Urban Runoff/Storm Sewers Animal Operations
South Fork Kentucky River (Lee Co.)	SW-PS	11.5-45.0	Pathogens	Source Unknown Package Plants Municipal Point Sources
South Fork Red River (Powell Co.)	AL-NS	0.0-10.1	Salinity/TDS/Chlorides	Petroleum Activities
Stratton Fork (Perry Co.)	AL-NS	0.0-7.0	Siltation	Resource Extraction
Town Branch (Fayette Co.)	AL-NS	0.0-11.3	Nutrients Organic Enrichment/low DO	Urban Runoff / Storm Sewers

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Troublesome Creek (Breathitt Co.)	SW-NS	0.0-49.5	Pathogens	On-site Wasterwater Systems (Septic Tanks) Urban Runoff/Storm Sewers Municipal Point Sources Package Plants
Turkey Creek (Letcher Co.)	AL-PS	0.0-6.4	Siltation	Resource Extraction
Wright Fork (Letcher Co.)	AL-NS	0.0-4.7	Siltation	Resource Extraction
Yonts Fork (Letcher Co.)	AL-NS	0.0-3.4	Siltation	Resource Extraction
SALT RIVER BASIN				
Brooks Run (Bullitt Co.)	AL-NS SW-NS	0.0-6.0 0.0-6.0	Organic Enrichment Pathogens	Package Plants Urban Runoff/ Storm Sewers
Buckhorn Creek (Marion Co.)	AL-NS SW-NS	0.0-2.3 0.0-2.3	pH	Hydromodification
Chenoweth Run (Jefferson Co.)	AL-PS SW-NS	0.0-5.2 0.0-9.0	Noxious Aquatic Plants Nutrients Pathogens	Municipal Point Sources
Cox Creek (Bullit Co.)	AL-NS	0.0-23.5	Siltation Nutrients	Agriculture
Fern Creek Northern Ditch (Jefferson Co.)	AL-NS SW-NS	0.0-10.1 0.0-10.1	Metals Organic Enrichment/low DO Pathogens	Municipal Point Sources Urban Runoff Storm Sewers On-site Wastewater Systems (Septic Tanks)
Fishpool Creek (Jefferson Co.)	AL-NS SW-NS	0.0-5.4 0.0-5.4	Metals Organic Enrichment/low DO Pathogens	Municipal Point Sources Urban Runoff/Storm Sewers On-site Wastewater Systems (Septic Tanks)

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Floyds Fork (Bullit Co.)	AL-PS AL-NS SW-NS	0.0-7.4 7.4-61.6 0.0-13.8	Organic Enrichment/low DO Nutrients Pathogens	Urban Runoff/Storm Sewers Agriculture Package Plants Municipal Point Sources
Mill Creek (Hardin Co.)	AL-NS	6.0-7.0	Organic Enrichment/low DO Chlorine Metals	Package Plants Municipal Point Sources Industrial Point Sources
Mill Creek Branch (Hardin Co.)	AL-PS	0.0-0.7	Organic Enrichment/low DO	Package Plants Municipal Point Sources
Mussin Branch (Marion Co.)	AL-NS SW-NS	0.0-0.5 0.0-0.5	pH	Hydromodification
Pond Creek (Bullitt Co.)	AL-NS SW-PS	0.0-17.0 0.0-17.0	Organic Enrichment/low DO Metals Pathogens	Combined Sewer Overflow Package Plants On-site Wasterwater Systems (Septic Tanks) Municipal Point Sources
Rolling Fork (Bullit Co.)	SW-PS	0.0-20.1	Pathogens	Agriculture
Salt River (Jefferson Co.)	AL-PS SW-PS SW-NS FC-PS AL-PS	125.9-128.7 78.0-88.5 11.4-25.2 11.4-25.2 25.2-59.0	Pathogens Organic Enrichment/low DO Siltation Nutrients Pesticides	Dam Construction On-site Wastewater Systems (Septic Tanks) Off-farm Animal Holding/Management Area Animal Operations Pasture Land Irrigated Crop Production Nonirrigated Crop Production Package Plants Municipal Point Sources

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Town Creek (Mercer Co.)	SW-PS AL-PS	0.0-2.5 0.0-2.5	Pathogens Organic Enrichment/low DO Nutrients	Sanitary Sewer Overflow Urban Runoff
UT of Rolling Fork at MP 94.6 (Marion Co.)	AL-NS SW-NS	0.0-0.6 0.0-0.6	pH	Highway Construction
GREEN RIVER BASIN				
Bacon Creek (Hart Co.)	SW-PS	0.0-31.2	Pathogens	Agriculture
Barren River (Warren Co.)	SW-NS	29.4-43.6	Pathogens	Urban Runoff/Storm Sewers Agriculture
Bat East Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-7.3 0.0-7.3	pH Metals	Acid Mine Drainage
Beech Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-3.4 0.0-3.4	pH	Acid Mine Drainage
Boyds Creek (Barren Co.)	AL-NS	0.0-1.7	Oil and Grease	Natural Sources
Brier Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-4.7 0.0-4.7	pH	Acid Mine Drainage
Caney Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-7.1 0.0-7.1	pH Metals	Acid Mine Drainage
Caney Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-7.0 0.0-7.0	pH	Acid Mine Drainage
Cash Creek (Henderson Co.)	AL-NS	5.1-8.7	Siltation	Channelization Hydromodification
Crab Orchard Creek (Hopkins Co.)	AL-NS SW-NS	0.0-7.6 0.0-7.6	pH	Acid Mine Drainage
Cypress Creek (McLean Co.)	AL-PS AL-NS SW-PS SW-NS	22.9-25.0 25.0-33.3 22.9-25.0 25.0-33.0	pH	Acid Mine Drainage

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Dismal Creek (Edmonson Co.)	AL-NS SW-NS	0.0-2.3 0.0-2.3	pH	Acid Mine Drainage
Drakes Creek (Hopkins Co.)	AL-NS FC-NS SW-NS	0.0-8.5 0.0-21.3 0.0-8.5	Priority Organics pH	Industrial Point Sources Acid Mine Drainage
Duncan Creek (Logan Co.)	AL-PS SW-PS	0.0-2.4 0.0-2.4	Pathogens Organic Enrichment/low DO Nutrients	Agriculture
Flat Creek (Hopkins Co.)	AL-NS SW-NS	0.0-10.6 0.0-10.6	pH	Acid Mine Drainage
Grays Branch (Hopkins Co.)	AL-NS SW-NS	0.0-4.3 0.0-4.3	pH	Acid Mine Drainage
Green River (Henderson Co.)	AL-PS SW-PS	71.3-108.6 183.5-250.2	Pathogens Nutrients	On-site Wastewater Systems (Septic Tank) Nonirrigated Crop Production Land Disposal Agriculture Municipal Point Source
Harris Branch (Muhlenberg Co.)	AL-NS SW-NS	0.0-2.6 0.0-2.6	pH	Acid Mine Drainage
Issacs Creek (Hopkins Co.)	AL-NS SW-NS	0.0-5.8 0.0-5.8	pH	Acid Mine Drainage
Joes Run (Daviess Co.)	AL-NS SW-NS	0.0-4.3 0.0-4.3	pH	Acid Mine Drainage
Lewis Creek (Ohio Co.)	AL-NS SW-NS	0.0-11.8 0.0-11.8	Siltation pH	Acid Mine Drainage Agriculture
Lick Creek (Henderson Co.)	AL-NS	4.9-13.7	Siltation	Channelization Hydromodification
Little Cypress Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-10.4 0.0-10.4	pH	Acid Mine Drainage
Little Hazel Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-3.9 0.0-3.9	pH	Acid Mine Drainage

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Little Pitman Creek (Taylor Co.)	AL-PS	5.9-10.1	Metals Pesticides Unknown Toxicity	Source Unknown Municipal Point Sources
Little Reedy Creek (Butler Co.)	AL-NS SW-NS	0.0-12.0 0.0-12.0	pH	Acid Mine Drainage
Mud River (Ohio Co.)	AL-PS FC-NS	9.0-30.5 0.0-64.8	Priority Organics	Industrial Point Sources
Nelson Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-4.3 0.0-4.3	pH	Acid Mine Drainage
Nolin River (Edmonson Co.)	SW-PS	44.0-93.2	Pathogens	Agriculture
North Fork Panther Creek (Daviess Co.)	AL-NS	0.0-12.7	Other habitat alterations Flow Alterations	Channelization Hydromodification
Pleasant Run (Hopkins Co.)	AL-NS SW-NS	0.0-7.9 0.0-7.9	pH	Acid Mine Drainage
Pond Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-23.8 0.0-23.8	Metals pH	Acid Mine Drainage
Pond River (Hopkins Co.)	AL-PS SW-PS	1.0-31.1 1.0-31.1	pH	Resource Extraction
Render Creek (Ohio Co.)	AL-NS SW-NS	0.0-3.3 0.0-3.3	pH	Acid Mine Drainage
Rhodes Creek (Daviess Co.)	AL-NS	1.2-7.3	Other habitat alterations Siltation	Channelization Hydromodification Agriculture
Richland Slough (Henderson Co.)	AL-NS	0.0-6.2	Siltation	Channelization Hydromodification Agriculture
Sandlick Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-4.0 0.0-4.0	pH Metals	Acid Mine Drainage
South Fork Panther Creek (Daviess Co.)	AL-NS	22.6-32.5	Other Habitat Alterations Flow Alteration	Channelization Hydromodification
South Fork Russell Creek (Green Co.)	AL-NS	0.0-0.6	Salinity/TDS/Chlorides	Petroleum Activities

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Southards Creek (Ohio Co.)	AL-NS SW-NS	0.0-2.3 0.0-2.3	pH	Acid Mine Drainage
Thompson Creek (Muhlenberg Co.)	AL-NS SW-NS	0.0-6.0 0.0-6.0	pH	Acid Mine Drainage
Town Branch (Logan Co.)	AL-PS FC-NS	3.0-4.0 0.0-6.7	Organic Enrichment/low DO Metals Priority Organics	Municipal Point Sources Industrial Point Sources
West Fork Drakes Creek (Warren Co.)	FC-NS FC-NS	0.0-8.3 17.1-32.8	Priority Organics	Industrial Point Sources
Williams Creek (Ohio Co.)	AL-NS SW-NS	0.0-5.3 0.0-5.3	pH	Acid Mine Drainage
TRADEWATER RIVER BASIN				
Brooks Creek (Hopkins Co.)	AL-NS SW-NS	0.0-4.3 0.0-4.3	pH	Acid Mine Drainage
Buffalo Creek (Hopkins Co.)	AL-NS SW-NS	0.0-8.6 0.0-8.6	pH	Acid Mine Drainage
Cane Run (Hopkins Co.)	AL-NS SW-NS	0.0-3.4 0.0-3.4	pH	Acid Mine Drainage
Caney Creek (Hopkins Co.)	AL-NS SW-NS	0.0-11.3 0.0-11.3	pH	Acid Mine Drainage
Clear Creek (Hopkins Co.)	AL-NS SW-NS	0.0-25.8 0.0-25.8	pH	Acid Mine Drainage
Fox Run (Hopkins Co.)	AL-NS SW-NS	0.0-2.1 0.0-2.1	pH	Acid Mine Drainage
Lambs Creek (Hopkins Co.)	AL-NS AL-NS SW-NS SW-NS	2.5-3.7 4.1-7.8 2.5-3.7 4.1-7.8	pH	Acid Mine Drainage
Lick Creek (Hopkins Co.)	AL-NS SW-NS	0.0-18.1 0.0-18.1	pH	Acid Mine Drainage
Pogue Creek (Hopkins Co.)	AL-NS SW-NS	0.0-4.6 0.0-4.6	pH	Acid Mine Drainage
Pond Creek (Hopkins Co.)	AL-NS SW-NS	0.0-4.6 0.0-4.6	pH	Acid Mine Drainage

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Sugar Creek (Hopkins Co.)	AL-NS SW-NS	0.0-5.3 0.0-5.3	pH	Acid Mine Drainage
Tradewater River (Union Co.)	AL-PS	63.0-92.2	Siltation	Resource Extraction
LOWER CUMBERLAND BASIN				
Elk Fork (Todd Co.)	AL-PS	27.6-28.6	Suspended Solids Nutrients	Municipal Point Sources
Little River (Trigg Co.)	AL-PS	23.6-61.0	Nutrients Siltation	Nonirrigated Crop Production Pasture Land
North Fork Little River (Christian Co.)	AL-PS SW-NS	0.0-15.9 0.0-14.0	Pathogens Nutrients Siltation	Agriculture Urban Runoff/Storm Sewers Resource Extraction
South Fork Little River (Christian Co.)	AL-PS	0.0-25.4	Nutrients Siltation	Industrial Point Sources Agriculture
TENNESSEE RIVER BASIN				
Clarks River (McCracken Co.)	AL-PS AL-NS	37.7-59.2 31.1-36.0	Siltation Organic Enrichment/low DO Nutrients	Nonirrigated Crop Production Sanitary Sewer Overflow Municipal Point Sources
Island Creek (McCracken Co.)	AL-NS	0.0-10.3	Organic Enrichment/low DO Nutrients	Urban Runoff/Storm Sewers Agriculture Industrial Point Sources
MISSISSIPPI RIVER BASIN				
Anderson Creek (Graves Co.)	AL-NS	0.0-2.2	Suspended Solids	Resource Extraction
Bayou de Chien (Fulton Co.)	AL-PS SW-PS	14.0-25.9 14.0-25.9	Pathogens pH	Agriculture
Central Creek (Carlisle Co.)	AL-NS	0.0-0.4	Chlorine	Municipal Point Sources

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Long Creek (Carlisle Co.)	AL-NS	0.0-0.8	Suspended Solids	Municipal Point Sources
Obion Creek (Graves Co.)	AL-NS	37.5-38.5	Siltation	Streambank Modification/Destabilization Hydromodification
Shawnee Creek (Ballard Co.)	AL-NS	7.9-8.9	Organic Enrichment/low DO Nutrients	Agriculture Municipal Point Sources
Truman Creek (Carlisle Co.)	AL-NS	2.5-3.1	Chlorine Organic Enrichment/low DO Suspended Solids	Municipal Point Sources
West Fork Mayfield Creek (Carlisle Co.)	AL-NS	17.2-18.2	Nutrients	Municipal Point Sources
OHIO RIVER BASIN (Minor Tribs)				
Allen Fork (Boone Co.)	AL-NS	2.0-4.6	Suspended Solids Other habitat alterations Nutrients	Hydromodification Urban Runoff/Storm Sewers Construction Municipal Point Sources
Bayou Creek (McCracken Co.)	AL-NS	0.0-11.3	Priority Organics	Land Disposal
Beargrass Creek (Jefferson Co.)	AL-NS	0.0-1.6	Metals Organic Enrichment/low DO	Urban Runoff/ Storm Sewers Combined Sewer Overflow Municipal Point Sources On-site Wastewater Systems
Brush Creek (Campbell Co.)	AL-NS	0.0-1.6	Organic Enrichment/low DO	Municipal Point Sources
Butchers Creek (Hancock Co.)	AL-NS SW-NS	0.0-2.3 0.0-2.3	pH	Acid Mine Drainage
Crooked Creek (Crittenden Co.)	SW-NS	22.3-23.3	Pathogens	Sanitary Sewer Overflow
Dry Creek (Gallatin Co.)	AL-NS	0.0-1.3	Suspended Solids Organic Enrichment/low DO	Municipal Point Sources

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Elijahs Creek (Boone Co.)	AL-NS	0.0-5.2	Nonpriority Organics	Major Industrial Point Source Industrial Point Sources
Four Mile Creek (Campbell Co.)	AL-NS SW-NS	8.4-9.4 0.0-0.2	Pathogens Organic Enrichment/low DO Nutrients	Sanitary Sewer Overflow Package Plants Municipal Point Sources
Goose Creek (Jefferson Co.)	AL-PS AL-NS SW-PS SW-NS	4.5-11.7 0.0-4.5 0.0-4.5 4.5-11.7	Metals Organic Enrichment/low DO Pathogens	Municipal Point Sources Urban Runoff/Storm Sewers On-site Wastewater System (Septic Tanks)
Gunpowder Creek (Boone Co.)	AL-PS AL-NS	18.9-21.6 15.7-18.9	Nonpriority Organics Cause Unknown	Industrial Permitted Urban Runoff/Storm Sewers
Harrods Creek (Jefferson Co.)	AL-NS	0.0-4.0	Organic Enrichment/low DO Metals	On-site Wastewater Systems (Septic Tanks) Urban Runoff/Storm Sewers Package Plants Municipal Point Sources
Kinniconick Creek (Lewis Co.)	SW-PS	0.0-24.5	Pathogens	On-site Wastewater Systems (Septic Tanks)
Hite Creek (Jefferson Co.)	AL-NS	0.0-5.5	Unknown Toxicity	Municipal Point Sources
Lawrence Creek (Mason Co.)	SW-PS	6.0-7.0	Pathogens	Municipal Point Sources
Little Bayou Creek (McCracken Co.)	AL-NS FC-NS	0.0-6.5 0.0-6.5	Priority Organics	Hydromodification Industrial Point Sources
Little Goose Creek (Jefferson Co.)	AL-PS SW-NS	0.0-8.7 0.0-8.7	Metals Organic Enrichment/low DO Pathogens	Municipal Point Sources Urban Runoff/Storm Sewers On-site wastewater systems (Septic Tanks)
Massac Creek (McCracken Co.)	AL-NS	0.0-10.0	Organic Enrichment/low DO Nutrients	Package Plants Municipal Point Sources

Table A1-3: Impaired Streams

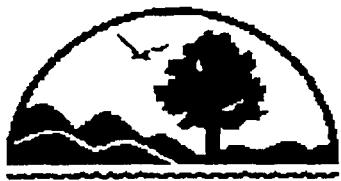
STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
Middle Fork Beargrass Creek (Jefferson Co.)	AL-NS	0.0-15.2	Organic Enrichment/low DO Metals	Urban Runoff/Storm Sewers Combined Sewer Overflow Package Plants Municipal Point Sources
Mill Creek (Jefferson Co.)	AL-NS SW-NS	0.0-4.4 0.0-4.4	Pathogens Siltation Organic Enrichment/low DO Turbidity Other Habitat Alterations	Land Disposal Urban Runoff / Storm Sewers Hydromodification Construction
Muddy Fork (Jefferson Co.)	AL-NS SW-PS	0.0-6.9 0.0-6.9	Metals Organic Enrichment/low DO Pathogens Unknown Toxicity	Municipal Point Sources Urban Runoff/Storm Sewers On-site Wastewater Systems (Septic Tanks)
Notch Lick Creek (Carroll Co.)	AL-NS	0.0-2.0	Other habitat alterations	Hydromodification
Perkins Creek (McCracken Co.)	AL-NS SW-PS	0.0-3.0 0.0-3.0	Pathogens Organic Enrichment/low DO Nutrients	Sanitary Sewer Overflow
Pond Creek (Oldham Co.)	AL-PS	0.0-1.5	Nutrients Chlorine Cause Unknown	Municipal Point Sources Source Unknown Package Plants
South Fork Beargrass Creek (Jefferson Co.)	AL-NS SW-PS SW-NS	0.0-14.6 6.0-14.6 0.0-6.0	Pathogens Metals Organic Enrichment/low DO	Urban Runoff/Storm Sewers Combined Sewer Overflow
UT of Elijahs Creek (Boone Co.)	AL-PS	0.0-1.5	Nutrients	Logging Road Construction/Maintenance Silviculture

Table A1-3: Impaired Streams

STREAM	USE NOT SUPPORTED	SEGMENT MILEPOINTS	CAUSES OF IMPAIRMENT	SOURCES OF IMPAIRMENT
UT of Pond Creek at MP1.5 (Oldham Co.)	AL-PS AL-NS	0.5-0.9 0.0-0.5	Organic Enrichment/low DO Siltation Nutrients Chlorine	Urban Runoff/Storm Sewers Land Development Package Plants Municipal Point Sources
West Fork Massac Creek (McCracken Co.)	AL-NS	0.0-3.7	Organic Enrichment/low DO Nutrients	Package Plants Municipal Point Sources
Woolper Creek (Boone Co.)	AL-NS	11.5-13.6	Suspended Solids Other habitat alterations Organic Enrichment/low DO Nutrients	Hydromodification Urban Runoff/Storm Sewers Construction Package Plants Municipal Point Sources

Abbreviations:

AL	-	Aquatic Life
FC	-	Fish Consumption
SW	-	Swimming
DW	-	Drinking Water
PS	-	Partial Support
NS	-	Nonsupport



News

from the
**Natural Resources and
Environmental Protection Cabinet**

James E. Bickford, Secretary

Division of Water
Frankfort, Ky. 40601
502-564-3410

Contact: Maleva Chamberlain
Division of Water
(502) 564-3410
Kim Saylor Brannock
Department for Health Services
(502) 564-6786

KENTUCKIANS ADVISED AGAINST SWIMMING IN SOME STREAMS IN THE STATE

FRANKFORT, KY (May 23, 1996) -- The Kentucky Division of Water, together with the Department for Health Services, advises Kentuckians to avoid swimming and other recreational contact with waters in three areas of the Commonwealth.

These advisories were issued in July 1994 and were re-issued in 1995 because of the presence of high levels of fecal coliform bacteria. The source of the fecal coliform bacteria, present in human and animal waste, includes sanitary (both municipal and package) wastewater treatment plant discharges, malfunctioning septic systems, and illegal straight-pipe discharges.

This type of bacteria indicates the presence of untreated or inadequately treated sewage and creates a potential for acquiring infectious disease, particularly diarrheal illnesses. Persons swimming or playing in the water in areas where swimming advisories are posted face the possibility of illness.

Sampling for 1996 has been completed for the North Fork of the Kentucky River and for the Upper Cumberland. High waters from recent heavy rains have delayed sampling of the Licking River this year, but the advisory there is considered still in effect until sampling is completed.

Swimming advisories are still in effect by the Division of Water and the
Kentucky Department for Health Services for the following:

Upper Cumberland River

Results of recent sampling indicate the need to re-issue the advisory for the Upper Cumberland River for the following areas:

- The Cumberland River from Fourmile Bridge (HWY 2014) to Pineville at HWY 66 Bridge
- The Cumberland River from Wallins Creek Bridge (HWY 219) to Harlan

-more-

KENTUCKIANS ADVISED AGAINST SWIMMING IN SOME STREAMS IN THE STATE - Page 2

- Martins Fork from Harlan to Cawood Water Plant
- The entire stretch of Catrons Creek, the entire stretch of Clover Fork, and the entire stretch of Straight Creek
- Poor Fork from Harlan to Looney Creek
- Looney Creek from the mouth to Lynch Water Plant Bridge.

Problems in the area contributing to poor water quality include many bypasses from sewage collection systems as well as other noncompliance problems.

North Fork of the Kentucky River

A swimming advisory is being re-issued for the North Fork of the Kentucky River upstream of Chavies. Problems with municipal wastewater treatment plants as well as numerous illegal straight pipe discharges of sewage contribute to water quality problems in the area that remains posted.

Licking River

A swimming advisory is still in effect for the Licking River from Banklick Creek to the confluence with the Ohio River. The advisory includes the entire length of both Banklick Creek and Three Mile Creek. Problems in this area that contribute to high fecal coliform pollution include combined sewer overflows and sanitary sewer overflows.

Urban areas

The agencies also recommend that there be no swimming or other full-body contact with rivers in and directly below urban areas, particularly after a significant rainfall. This recommendation is for urban areas along waterways throughout Kentucky because of the increased potential for exposure to pollution from illegal straight pipe discharges, bypasses from sewage collection systems, and combined sewer overflows.

-30-

NOTE TO EDITOR: Sampling data for the North Fork and for the Upper Cumberland are available from the Division of Water upon request.